

## CLAIMS

1. A method for fabricating a muntin bar grid for a window comprising the steps of:

5 (a) providing at least two muntin grid elements;

(b) providing at least two material strips;

(c) connecting at least one material strip to each of the muntin grid elements to form two muntin grid pieces; and

10 (d) assembling the at least two muntin grid pieces together to form a muntin bar grid after the material strips are connected to the muntin grid elements.

2. The method of claim 1, further comprising the steps of forming notches in the muntin grid elements before step (c).

15 3. The method of claim 2, wherein step (d) includes the step of mating the notches of the muntin grid elements to form the muntin bar grid.

4. The method of claim 1, further comprising the steps of providing a controller and automated equipment, inputting window size data into the controller, and  
20 using the automated equipment to create the muntin bar elements and material strips.

5. The method of claim 1, wherein the step of providing at least two muntin grid elements is free of the step of painting the muntin grid elements.

5 6. The method of claim 1, wherein step (b) includes the steps of determining the location of the material strips with respect to the grid and cutting the material strips to a length related to the location of the material strip with respect to the grid.

10 7. The method of claim 1, further comprising the step of using a computer to control the steps of providing at least two muntin grid elements and at least two material strips.

15 8. The method of claim 1, further comprising the steps of providing additional material strips and connecting the additional material strips to the muntin grid elements before step (d) occurs.

9. The method of claim 1, wherein step (b) and (c) are performed on automated equipment.

20 10. The method of claim 1, further comprising the step of providing a measuring apparatus to measure the length of the muntin grid element.

11. The method of claim 10, further comprising the step of calculating a length measurement for the material strip based on the length of the muntin grid element measured by the measuring apparatus.

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12. The method of claim 1, wherein step (a) includes the step of roll forming the muntin grid element.

13. The method of claim 12, further comprising the step of cutting the roll formed muntin grid element to a length for the muntin bar grid.

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14. The method of claim 13, further comprising the steps of providing a controller; determining the height and width of the window wherein the muntin bar grid will be installed; and using the controller to determine the muntin grid configuration based on the height and width of the window.

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15. The method of claim 14, further comprising the step of using the controller to determine the number and sizes of material strips for the grid configuration.

16. The method of claim 15, wherein step (c) is controlled by the controller.

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17. The method of claim 1, wherein step (b) includes the step of forming the material strip stock in combination with a length of non-extensible material connected to the material strip stock.

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18. The method of claim 17, further comprising the step of embedding the length of non-extensible material within the material strip stock.

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19. The method of claim 1, wherein step (b) includes the step of providing the material strip stock with adhesive and providing the adhesive with a non-extensible member.

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20. The method of claim 1, wherein step (e) includes the step of providing a laminater and using the laminater to connect the material strips to the muntin grid elements.

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21. The method of claim 1, wherein step (c) includes the step of determining if the muntin grid element is an internal element or an external element.

22. The method of claim 21, further comprising the step of calculating the length of the internal material strips by determining the length between muntin grid elements and subtracting twice the thickness of the material strip.

23. The method of claim 22, further comprising the step of calculating the length of the external material strips by determining the length from the intersection to the end of the muntin grid element.

5 24. The method of claim 23, further comprising the step of adding extra length to the length of the external material strip to form a flap.

25. The method of claim 24, further comprising the steps of connecting a clip to the end of the muntin grid element and positioning the flap of the material strip over the clip.

10 26. The method of claim 25, further comprising the steps of:  
providing a spacer having an inwardly facing open channel;  
mounting the muntin grid piece into the spacer; and  
15 inserting the flaps of the material strips into the channel of the spacer.

27. The method of claim 1, wherein step (a) is free of the step of painting the muntin grid elements.

20 28. The method of claim 1, wherein step (e) includes the step of forming a mechanical connection between the material strips and the muntin grid element.

29. A method for fabricating a muntin bar grid for a window comprising the steps of:

- (a) providing a controller;
- (b) providing automated equipment in communication with the controller;
- 5 (c) providing a supply of raw material strip stock;
- (d) supplying window data to the controller;
- (e) using the automated equipment to create muntin grid elements and material strips based on the window data
- (f) connecting at least one material strip to each of the muntin grid
- 10 elements to form muntin grid pieces; and
- (g) assembling the muntin grid pieces together to form a muntin bar grid after the material strips are connected to the muntin grid elements.

30. The method of claim 29, wherein step (e) includes the step of determining

15 if the muntin grid element is an internal element or an external element.

31. The method of claim 30, further comprising the step of calculating the length of the internal material strips by determining the length between muntin grid elements and subtracting twice the thickness of the material strip.

32. The method of claim 31, further comprising the step of calculating the length of the external material strips by determining the length from the intersection to the end of the muntin grid element.

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33. The method of claim 29, wherein step (f) includes the step of providing a laminater and using the laminater to connect the material strips to the muntin grid elements.